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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,671	01/29/2004	Stephen Gerard Nikodem	21666-1	5421
7590	12/01/2005		EXAMINER	
John S. Beulick Armstrong Teasdale LLP Suite 2600 One Metropolitan Square St. Louis, MO 63102			BUMGARNER, MELBA N	
			ART UNIT	PAPER NUMBER
			3732	
			DATE MAILED: 12/01/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/767,671	NIKODEM, STEPHEN GERARD	
	Examiner Melba Bumgarner	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 09 September 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,2 and 4-18 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,2 and 4-18 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 13 July 2004 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

**DETAILED ACTION**

*Drawings*

1. The applicant has again noted on page 6 of the remarks that a replacement sheet including changes to figure 5 is attached; however, the replacement sheet was not submitted in the amendment of March 29, 2005 nor August 15, 2005.
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “a spring extending between said first and second ends” in claim 8 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Specification*

3. Applicant states that no amendments to paragraph 0024 were intended by the amendment of March 29, 2005; however, it is noted that the instructions have inadvertently deleted paragraph 024.

*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4-6, 9, 11-14, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Ziegler (4,187,610). Ziegler discloses an apparatus comprising a wire comprising a first end, a second end and a substantially planar body extending non-linearly therebetween, the body is unbraided between the first and second ends, the first end configured to couple to a tooth that is at least partially impacted, the second end configured to secure the apparatus relative to the tooth. The body comprises at least one eyelet formed between the ends. The body is sinusoidal shaped. The first end is capable of coupling to the tooth. The apparatus has a substantially uniform thickness between the ends. The apparatus further comprises an orthodontic fixture configured to be secured against an external surface of the tooth 12. Ziegler discloses a method of using the apparatus as claimed.

*Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3732

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7, 10, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ziegler in view of Sachdeva et al. (5,312,247). Ziegler discloses an apparatus that shows the limitations as described above; however, Ziegler does not show the wire fabricated from a superelastic material or shaped memory alloy. Sachdeva et al. teach an orthodontic wire which applies a continuous force to the tooth comprising superelastic or shaped memory alloy. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Ziegler with the wire of superelastic material of Sachdeva et al. in order to use a force supplying wire that can be easily shaped or manipulated for placement by the practitioner in view of Sachdeva et al.

8. Claim 8 is rejected as understood, under 35 U.S.C. 103(a) as being unpatentable over Ziegler. Ziegler discloses an apparatus that shows the limitations as described above; however, Ziegler does not show a spring extending between the first and second ends. It would have been an obvious matter of choice to one of ordinary skill in the art to call the wire of Ziegler a spring as it is similar to embodiment of figure 5 and a spring has not been shown or defined in the specification.

***Response to Arguments***

9. Applicant's arguments filed September 9, 2005 have been fully considered but they are not persuasive. The prior art show the structural limitations of the claims. The applicant's disclosure has not specifically defined the term "braided" in the disclosure to include tight twists in the wire as shown in the prior art. The accepted meaning of the term of "made by intertwining

three or more strands" (Merriam-Webster's Collegiate Dictionary tenth edition) has been applied. The applicant argues that the prior does not show the wire applies a substantially constant force to the tooth because the wire must be continuously repositioned. However, it is noted that the applicant's disclosure teaches the wire needing re-tightening less frequently than conventional wires, indicating that the claimed invention also may require less frequent but continuous repositioning.

***Conclusion***

10. Any inquiry concerning this communication and earlier communication from the examiner should be directed to Melba Bumgarner whose telephone number is 571-272-4709. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached at 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Melba Bumgarner  
Primary Examiner